NASA Participated in the Japan 2001 Science, Creativity and the Young Mind Workshop

Joe Kolecki as seen by the students at Bristol University.
Long description

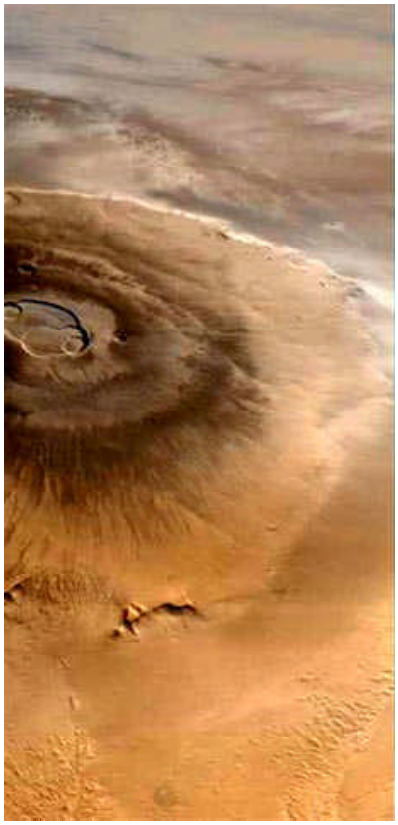
During the week of July 23, 2001, a workshop called the Japan 2001 Science, Creativity and the Young Mind took place at Bristol University in Bristol, England. Coordinated by the Clifton Scientific Trust, it brought together 60 British and Japanese students and provided them with a forum for learning and interacting. All the students were chosen from geographical areas of social deprivation, where university education is not seen as a natural progression for students. One of the aims of the workshop was to give the combined group a new view of themselves as potential scientists and an ambition to succeed at the highest level.

Members of the Glenn Research Center's Learning Technologies Project participated with six of the students and their team leaders as a Space Science Team. Four interactive videoconferencing sessions were held between the NASA Glenn Research Center and Bristol University on four consecutive days. During the sessions, students raised questions concerning various theories about the probable formation of volcanoes on Mars. Of specific interest was if the great Tharsis volcanoes might be the result of an ancient collision of planetary proportions, or if plate tectonic movement, evidence for which was recently discovered by NASA's Mars Global Surveyor Spacecraft, might account for them.

The basic philosophy of the four days was that science involves developing focused questions whose answers are to be sought through a combination of theory and experimentation. Using facts about Mars and terrestrial volcanoes, the students were challenged to extrapolate from the known to the unknown. It was apparent that the students experienced firsthand the excitement of real-life scientific investigation. They immersed themselves completely in their activities, to the point of even working through lunch periods, breaks, and after hours. Their final presentations exceeded all expectations on both sides of the Atlantic Ocean! A final report of their findings will be available from the Learning Technologies Project (LTP) web site.

In summary, the Japan 2001 workshop demonstrated effective collaboration between young people of diverse cultures, and showed that, given an exciting challenge and necessary resources, students will far exceed set goals and expectations. It also demonstrated, in a highly visible, international context, the effectiveness of using technology (ISDN videoconferencing, e-mail, data sharing, and the Internet) in an educational setting.

LTP is a partner in NASA's educational technology program unit, an electronic community center that fosters interaction, collaboration, and sharing among educators, learners, and scientists. Glenn's
LTP distance learning program, called NASA Virtual Visits, uses videoconferencing, the Internet, and interactions with experts to motivate science students by providing real-world experiences. Glenn's LTP is supported in this effort by the staff of the Integrated Design and Analysis Center, a facility developed by Glenn's Systems and Analysis Branch to support collaborative engineering between NASA, industry, and academia. A special thanks is extended to the External Programs Directorate for providing a Mars backdrop for the Japan 2001 event.



Martian volcano Olympus Mons, 1998.

Find out more on the World Wide Web:

Japan 2001 Science, Creativity and the Young Mind Workshop

http://www.clifton-scientific.org/j2001/index.htm

Glenn Learning Technologies Project (http://www.grc.nasa.gov/WWW/K-12/)

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